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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/941,963	10/01/1997	JEFFREY J. KRIZ	H16-17016-US	7591
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101 COLUMBIA ROAD			YAO, KWANG BIN	
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MOKKISTOW	/N, NJ 0/902-2243		ART UNIT	PAPER NUMBER
	q		2664	
			DATE MAILED: 06/10/2003	<b>,</b>

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	08/941,963	KRIZ, JEFFREY J.				
Office Action Summary	Examiner	Art Unit				
,	Kwang B. Yao	2664				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.  after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute	136(a). In no event, however, may a ly within the statutory minimum of thi will apply and will expire SIX (6) MOI e, cause the application to become A	reply be timely filed  ty (30) days will be considered timely.  NTHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).				
<ul> <li>Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).</li> <li>Status</li> </ul>	g date of this communication, even if	timely filed, may reduce any				
1) Responsive to communication(s) filed on 03.	<u> April 2003</u> .					
2a)⊠ This action is <b>FINAL</b> . 2b)□ Th	nis action is non-final.					
3) Since this application is in condition for allow closed in accordance with the practice under Disposition of Claims						
4) Claim(s) 1-3,5-11,13-17,26-28,30-35 and 39	is/are nending in the appli	cation				
4a) Of the above claim(s) is/are withdra	, -	odion.				
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-3,5-11,13-17,26-28,30-35 and 39</u> is/are rejected.						
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers	·					
9)☐ The specification is objected to by the Examine	er.					
10)☐ The drawing(s) filed on is/are: a)☐ acce	pted or b) objected to by	the Examiner.				
Applicant may not request that any objection to the	ne drawing(s) be held in abey	ance. See 37 CFR 1.85(a).				
11) The proposed drawing correction filed on	_ is: a)☐ approved b)☐ o	disapproved by the Examiner.				
If approved, corrected drawings are required in re	• •					
12) The oath or declaration is objected to by the Ex	kaminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).				
a) All b) Some * c) None of:						
1. Certified copies of the priority document	ts have been received.					
2. Certified copies of the priority document	ts have been received in A	Application No				
<ul> <li>3. Copies of the certified copies of the prio</li> <li>application from the International Bu</li> <li>See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 17.2(a)).	•				
14) Acknowledgment is made of a claim for domest	ic priority under 35 U.S.C.	§ 119(e) (to a provisional application).				
a)  The translation of the foreign language pro						
Attachment(s)	•					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)				

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#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 39 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Canada et al. (US 5,854,994).

Canada et al. discloses an apparatus comprising the following features: a plurality of machine monitors 4 in Fig. 1 for transmitting information using a low power battery and receiving information; a plurality of repeaters 8 for being located proximate to the machine monitors 4 and for wireless communication with other repeaters or monitors using AC power outlet; command station 6 for controlling the repeaters 8 and machine monitors. See column 7, lines 42-52, and column 10, lines 51-56.

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# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 3, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada et al. (US 5,854,994) in view of Carvey (US 5,699,357).

Canada et al. discloses the claimed limitations above. Canada et al. does not disclose the claimed features of: at least one of the devices is selected from the group consisting of sensors, actuators, and controllers. Carvey discloses a personal data network comprising the following features: PEAs 21, ..., 29 being selected from the group of sensors, actuators, controllers. It would have been obvious to one of the ordinary skill in the art at the time of the invention to use the features, as taught by Carvey, in the system of Canada et al., in order to provide various applications, see column 2, lines 2-13.

5. Claims 2, 5-9, 11, 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada et al. (US 5,854,994) in view of Carvey (US 5,699,357) as applied to claims 1 and 10 above, and further in view of Velasco (US 5,032,845).

Canada et al. and Carvey disclose the claimed limitation above. However, they do not disclose the claimed features of: low power transceiver has a low data bandwidth; higher power transceiver has a high bandwidth; the controller is coupled to an external telephone line. Velasco discloses a system comprising the following features: vehicle 13 in Fig. 1 transmits data in VHF band; local master and central master transmit data in UHF band; wherein the VHF has lower

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bandwidth than UHF; central master in Fig. 4 is coupled to an external telephone line.

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Canada et al. and Carvey, by using the features, as taught by Velasco, in order to provide an efficient data transmission system.

6. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada et al. (US 5,854,994) in view of Velasco (US 5,032,845) and Parken (US 5,010,583).

Canada et al. discloses an apparatus comprising the following features: in Fig. 4, a transceiver 604 (claimed first router node) hardwired couple into the computer 612 (claimed central controller); a repeater 8a in Fig. 1 (claimed second router node) for receiving low power transmission form a plurality of machine monitors 4, and receiving and transmitting high power transmission to and from another repeater or command station 6. See column 7, lines 42-52, and column 10, lines 51-56. Canada et al. does not disclose the claimed features of: receiving high bandwidth information from other repeaters or command station; a first receiver, a second receiver and a first transmitter. Velasco discloses a system comprising the following features: vehicle 13 in Fig. 1 transmits data in VHF band; local master and central master transmit data in UHF band; wherein the VHF has lower bandwidth than UHF. Parken discloses a repeater for a wide area coverage multiple repeater system comprising the following features: receiver 220 in Fig. 2 for receiving signals from a portable unit 130 in Fig. 1; transceiver 230 including a transmitter TX 232 and a receiver RX 234 for retransmitting the received signals and receiving the signals from other repeaters. It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Canada et al., by using the features, as

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taught by Velasco and Parken, in order to reduce the possibilities of transmission collisions. See column 1, lines 20-22 Parken.

7. Claims 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada et al. (US 5,854,994) in view of Parken (US 5,010,583), Carvey (US 6,128,290), and Velasco (US 5,032,845).

Canada et al. a system comprising the following features: repeater 8a (claimed router node) in Fig. 1 for receiving low power transmission from a plurality of machine monitors (claimed plurality of devices) located proximate the repeater; for receiving information from other repeaters, such as repeater 8d (claimed other routers); and for transmitting information to machine monitors at a higher power level. See column 7, lines 42-52, and column 10, lines 51-56. Canada et al. disclose only one transceiver 808 in Fig. 7 for the repeater, rather than the claimed two transceivers. Moreover, Canada et al. does not disclose the claimed features of: at least one of the devices is selected from the group consisting of sensors, actuators, and controllers, and high bandwidth transmission. Parken discloses a repeater for a wide area coverage multiple repeater system comprising the following features: receiver 220 in Fig. 2 for receiving signals from a portable unit 130 in Fig. 1; transceiver 230 including a transmitter TX 232 and a receiver RX 234 for retransmitting the received signals and receiving the signals from other repeaters. Carvey discloses a personal data network comprising the following features: PEAs 21, ..., 29 being selected from the group of sensors, actuators, controllers. Velasco discloses a system comprising the following features: vehicle 13 in Fig. 1 transmits data in VHF band; local master and central master transmit data in UHF band; wherein the VHF has lower bandwidth than UHF. It would have been obvious to one of the ordinary skill in the art at the

time of the invention to modify the system of Canada et al., by using the features, as taught by Parken, Carvey and Velasco, in order to provide an efficient data transmission system.

### Response to Arguments

8. Applicant's arguments filed 4/3/03 have been fully considered but they are not persuasive.

On page 8, first and second paragraphs, regarding claim 39, Applicant argues that none of the devices disclosed in Canada appear to include a transceiver that transmits and receives at low power with some devices and at high power with other devices. (Emphasis added).

Examiner respectfully disagrees with these arguments. It is noted that the above underlined features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Moreover, Canada et al. discloses an apparatus comprising the following features: a plurality of machine monitors 4 in Fig. 1 for transmitting information using a low power battery and receiving information; a plurality of repeaters 8 for being located proximate to the machine monitors 4 and for wireless communication with other repeaters or monitors using AC power outlet; command station 6 for controlling the repeaters 8 and machine monitors. See column 7, lines 42-52, and column 10, lines 51-56. Therefore, it is maintained that Canada does anticipate the claimed invention in claim 39.

On page 9, second paragraph, regarding claims 1, 3, 10, Applicant argues that Carvey and Canada do not teach or suggest a router node that <u>operates at a low power level with low</u>

**power devices** and at a high power level with other routers. Examiner respectfully disagrees with these arguments. It is noted that the above underlined features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On page 9, third and fourth paragraph, Applicant argues that the combination of Canada and Carvey do not disclose the limitations recited in claims 3 and 10. Examiner respectfully disagrees with these arguments. It is noted that Canada et al. discloses an apparatus comprising the following features: a plurality of machine monitors 4 in Fig. 1 for transmitting information using a low power battery and receiving information; a plurality of repeaters 8 for being located proximate to the machine monitors 4 and for wireless communication with other repeaters or monitors using AC power outlet; command station 6 for controlling the repeaters 8 and machine monitors. See column 7, lines 42-52, and column 10, lines 51-56. Canada et al. does not disclose the claimed features of: at least one of the devices is selected from the group consisting of sensors, actuators, and controllers. Carvey discloses a personal data network comprising the following features: PEAs 21, ..., 29 being selected from the group of sensors, actuators, controllers. Therefore, it is maintained that the combined reference of Canada et al. and Carvey would have been obvious to arrive the limitations in claims 3 and 10.

9. On pages 9-11, regarding claims 2, 5-9, 11 and 13-17, Applicant argues that there is no motivation or suggestion or combine Canada et al. and Carvey. Examiner respectfully disagrees with this argument. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining

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or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation is found at column 2, lines 2-13 of Carvey (US 5,699,357).

On page 12, Applicant argues that he/she cannot find in Velasco that any of these devices transceive at low power devices and at higher power with other routers. (Emphasis added). Examiner respectfully disagrees with there arguments. It is noted that the above underlined features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On pages 12-13, Applicant argues that there is no motivation or suggestion to combine Canada, Carvey and Velasco. Examiner respectfully disagrees with there arguments. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

On page 13, fourth paragraph, regarding claims 26-28, Applicant argues that the cited references do not teach or suggest a router that sends and receives high power transmission with other routers and <u>low power transmission with other devices</u>. (Emphasis added). Examiner respectfully disagrees with there arguments. It is noted that the above underlined features upon

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which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On page 14, first paragraph, regarding claims 26-28, Applicant argues that the combined references do not teach the claimed limitations. Examiner respectfully disagrees with these arguments. Canada et al. discloses an apparatus comprising the following features: in Fig. 4, a transceiver 604 (claimed first router node) hardwired couple into the computer 612 (claimed central controller); a repeater 8a in Fig. 1 (claimed second router node) for receiving low power transmission form a plurality of machine monitors 4, and receiving and transmitting high power transmission to and from another repeater or command station 6. See column 7, lines 42-52, and column 10, lines 51-56. Canada et al. does not disclose the claimed features of: receiving high bandwidth information from other repeaters or command station; a first receiver, a second receiver and a first transmitter. Velasco discloses a system comprising the following features: vehicle 13 in Fig. 1 transmits data in VHF band; local master and central master transmit data in UHF band; wherein the VHF has lower bandwidth than UHF. Parken discloses a repeater for a wide area coverage multiple repeater system comprising the following features: receiver 220 in Fig. 2 for receiving signals from a portable unit 130 in Fig. 1; transceiver 230 including a transmitter TX 232 and a receiver RX 234 for retransmitting the received signals and receiving the signals from other repeaters. It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Canada et al., by using the features, as taught by Velasco and Parken, in order to reduce the possibilities of transmission collisions. See

column 1, lines 20-22. Therefore, it is maintained that the combined reference would have been obvious to achieve the claimed invention.

On page 14, second-fourth paragraphs, Applicant argues that the there is no motivation or suggestion to combine Canada, Velasco and Parken. Examiner respectfully disagrees with these arguments. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation is found at column 1, lines 20-22 of Parken (US 5,010,583).

On page 15, second paragraph, regarding claims 30-35, Applicant argues that the combined reference do not teach or suggest a router node that <u>transceives low power</u> <u>transmission with a plurality of devices</u> and high bandwidth transmissions with other routers. (Emphasis added). Examiner respectfully disagrees with these arguments. It is noted that the above underlined features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On page 15, third paragraph, Applicant argues that the combined reference do not include the limitations in claims 30-35. Examiner respectfully disagrees with these arguments. Canada et al. a system comprising the following features: repeater 8a (claimed router node) in Fig. 1 for

receiving low power transmission from a plurality of machine monitors (claimed plurality of devices) located proximate the repeater; for receiving information from other repeaters, such as repeater 8d (claimed other routers); and for transmitting information to machine monitors at a higher power level. See column 7, lines 42-52, and column 10, lines 51-56. Canada et al. disclose only one transceiver 808 in Fig. 7 for the repeater, rather than the claimed two transceivers. Moreover, Canada et al. does not disclose the claimed features of: at least one of the devices is selected from the group consisting of sensors, actuators, and controllers, and high bandwidth transmission. Parken discloses a repeater for a wide area coverage multiple repeater system comprising the following features: receiver 220 in Fig. 2 for receiving signals from a portable unit 130 in Fig. 1; transceiver 230 including a transmitter TX 232 and a receiver RX 234 for retransmitting the received signals and receiving the signals from other repeaters. Carvey discloses a personal data network comprising the following features: PEAs 21, ..., 29 being selected from the group of sensors, actuators, controllers. Velasco discloses a system comprising the following features: vehicle 13 in Fig. 1 transmits data in VHF band; local master and central master transmit data in UHF band; wherein the VHF has lower bandwidth than UHF. Therefore, it is maintained that the combined references would have been obvious to achieve the claimed inventions.

On page 16, Applicant argues that there is no motivation or suggestion to combine

Canada, Parken, Carvey and Velasco. Examiner respectfully disagrees with these arguments.

The test for obviousness is not whether the features of a secondary reference may be bodily
incorporated into the structure of the primary reference; nor is it that the claimed invention must
be expressly suggested in any one or all of the references. Rather, the test is what the combined

teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

#### Conclusion

10. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 703-308-7583. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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KWANG BIN YAO

Kwang B. Yao

June 6, 2003